

Great Lakes Restoration Initiative

2020 Progress Report

Since 2010, the Great Lakes Restoration Initiative has served as a catalyst for unprecedented federal agency coordination to protect and restore the largest system of fresh surface water in the world.

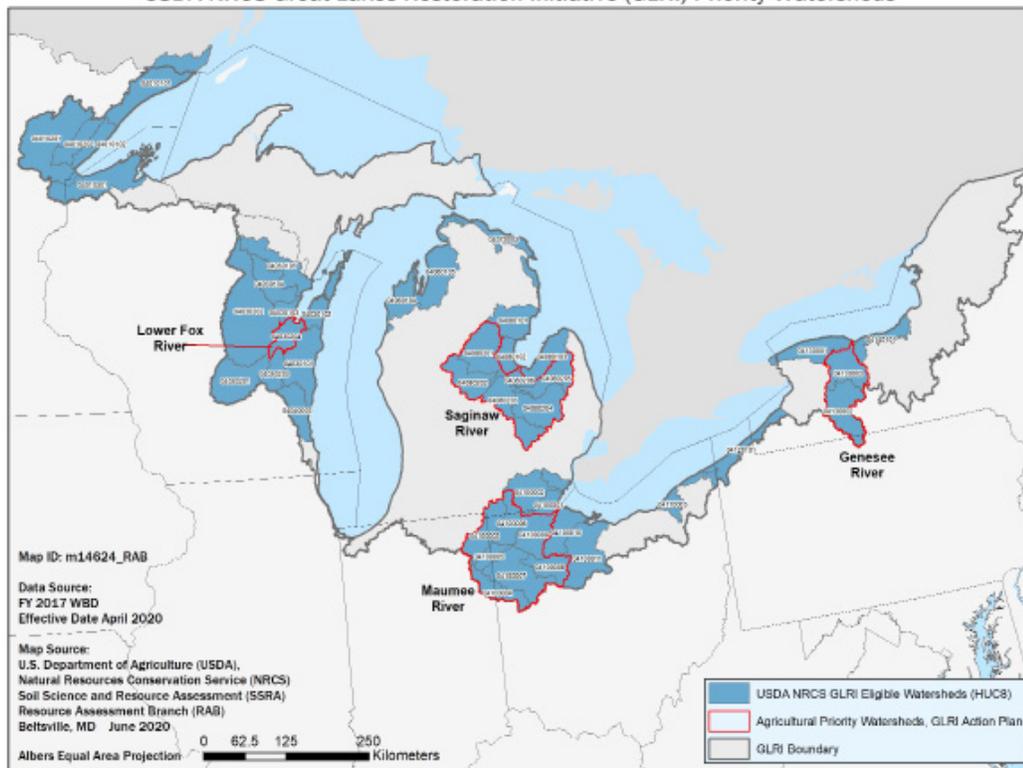
The Environmental Protection Agency (EPA) partners with several federal agencies, including the USDA's Natural Resources Conservation Service (NRCS) to strategically target the biggest threats to the Great Lakes ecosystem and to progress toward achieving long-term restoration goals. NRCS accelerates conservation efforts on private lands located in targeted watersheds throughout the region. Through GLRI, NRCS works with farmers and landowners to combat invasive species, protect watersheds and shorelines from water runoff carrying excess sediment and nutrients, and restore wetlands and other habitat areas.

NRCS Goals

NRCS utilizes GLRI funding to help farmers implement comprehensive, science-based solutions on private lands in priority watersheds where they can deliver the greatest water quality benefits.

Priority watersheds include the Genesee River, Maumee River, Saginaw River and Lower Fox River. These agriculture-dominated watersheds are the watersheds most in need of phosphorus reductions to prevent excess algae growth in the Great Lakes. NRCS offers financial and technical resources to assist farmers and landowners in reducing phosphorus losses from farms by over 250,000 pounds every year.

USDA NRCS Great Lakes Restoration Initiative (GLRI) Priority Watersheds



Methods

NRCS employs a suite of conservation practices that avoid losses from fields, control the movement of nutrients and water off of fields, and trap sediment and nutrients at the edges of fields, filtering water before it enters into nearby tributaries. The agency primarily utilizes Conservation Technical Assistance (CTA) and the Environmental Quality Incentives Program (EQIP) to assist farmers in improving water quality by restoring soil health, which reduces soil erosion and nutrient loss, while making agricultural operations more efficient. Additional assistance from Farm Bill conservation programs enable landowners to reduce input costs, employ innovative practices and make operations more resilient to the effects of climate change.

Priority practices installed under GLRI funding include: nutrient management; residue and tillage management; prescribed grazing; cover crops; wetland restoration; early successional habitat development; brush management; and herbaceous weed control.



Since 2010, NRCS has funded more than 2,880 conservation contracts, with over \$125 million in GLRI financial assistance, to help farmers implement conservation practices on over 654,000 acres within the Great Lakes Basin priority watersheds.



Through implementing conservation practices in the Great Lakes Region efforts to target phosphorus delivery have reduced over 1.5 million pounds of phosphorus in GLRI-targeted areas.



Nearly 8,000 acres of wildlife habitat have been protected, restored and/or enhanced by GLRI through implementing 87 contracts totaling \$303,054. Over 3,200 acres of aquatic/terrestrial invasive species were controlled by GLRI funded projects in 93 sites totaling \$680,311.

Amplifying the Impact

NRCS has established partnerships with federal, state, and private organizations to better target conservation for improving water quality in the Great Lakes region. NRCS is proud to be involved in GLRI, working directly with landowners and communities to improve and protect our natural resources and help people help the land. NRCS continues to work with the U.S. Geological Survey (USGS) through edge-of-field monitoring to track water quality benefits of conservation practices in priority watersheds located in Wisconsin, Ohio, Michigan, New York, and Indiana. Through GLRI funding, the NRCS, the USGS, University of Wisconsin–Green Bay, and Purdue University are monitoring sediment and nutrient export in surface water tile runoff from select farm fields in four priority watersheds. Collectively, the NRCS offices located in the Great Lakes have entered into more than 104 agreements with local conservation entities to provide technical assistance, outreach, education and conservation practice implementation.

Some of these local partners include soil and water conservation districts; universities; state departments of agriculture; producer groups; and state watershed alliances. As part of this partnership approach, NRCS can publicly showcase and demonstrate leading innovative conservation practices via a network of Demonstration Farms. NRCS has also developed a unique partnership with the Great Lakes Commission (GLC) to collaboratively reduce nutrient and sediment loss with an emphasis on a significant reduction of phosphorus loads in the Great Lakes region. GLC has successfully supported over 130 local projects.

NRCS has other target conservation initiatives in the Great Lakes region, working closely with partners to enhance water quality through: the National Water Quality Initiative, Western Lake Erie Basin Initiative and the Regional Conservation Partnership Program. As the NRCS moves forward in planning and implementing conservation under the GLRI,

the agency recognizes the importance of a dedicated partner network, including the EPA, Great Lakes states, and USDA-NRCS state, area and field staff.

Success Story



Dan and Ruth Boerst, owners of Dairy-Licious Farms in Manawa, WI, purchased their farm in 1982. The farm is located near the Little Wolf River, so farming activities have a direct impact on the health of the river. Soon after they began farming, they started working with NRCS and the Waupaca Co. Land Conservation staff to conserve soil and improve water quality. Recently, they converted an exercise lot and cropland into a prescribed grazing system, innovative cover and companion crops. They are planning to implement wetland restoration and pollinator planting in the near future.

In 2019, the Boersts were chosen to showcase and demonstrate conservation practices to the public as part of the new Upper Fox Wolf Demonstration Farm Network, funded through the Great Lakes Restoration Initiative. They are a prime example of how one farm's conservation efforts can impact an entire community.

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